



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Applicant: PLAN CREATIONS CO., LTD.
8 MOO 8, TRANG-PALIAN RD.,
YANTAKAO, TRANG, THAILAND 92140
ATTN: K.NARONG, K.SUPAPORN

Date: Apr 11, 2016

Sample description:

Quantity of sample:	One (1) set
Sample description:	Wooden toy
Date sample received:	March 21, 2016
Date Information received:	April 07, 2016

Client Information:

One (1) set of submitted sample said to be SHAPE MATCHING

Item Name: SHAPE MATCHING
Item Number: 5647



BKKH16004139

Tests conducted:

As requested by the applicant, for details please refer to attached pages.

Authorized by :

For Intertek Testing Services (Thailand)

Ladtaka W.

Ladtaka Wongwiboonporn
Laboratory Manager
Hardlines Department

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Conclusion:

<u>Tested samples</u>	<u>Standard</u>	<u>Result</u>
Submitted samples	EN71-1 : 2014 Mechanical and physical properties	Pass*
	EN71-2 : 2011 + A1 : 2014 Flammability test	Pass
	EN71-3 : 2013 + A1 : 2014 Migration of certain elements	Pass**

Remark: * = Please draw your attention on clause 7 in test report.

Note: ** = The components as below was comply to EN71-3 : 2013 + A1 : 2014.

<u>Components</u>	<u>Report No.</u>	<u>Date</u>
5020038 : Lacquer Water Base	BKKH15000568	Jan 21, 2015
5029034 Green Coating On Wood	BKKH15002674	Mar 09, 2015
5020031 Green coating on wood	BKKH15010877	Aug 28, 2015
Solid wood	BKKH15014517	Nov 20, 2015
Sawdust Wood	BKKH15014517	Nov 20, 2015
5020035 Yellow Coating On Wood	BKKH15014510	Nov 27, 2015
5020030 Yellow Coating On Wood	BKKH15014509	Nov 27, 2015
5020032 Blue Coating On Wood	BKKH15014509	Nov 27, 2015
5020033 Orange Coating On Wood	BKKH15014509	Nov 27, 2015
5029040 Orange Coating On Wood	BKKH15014513	Nov 30, 2015
5029074 Blue Coating On Wood	BKKH15014513	Nov 30, 2015

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

1 Mechanical and Physical Test

As per European Standard on Safety of toys EN71-1 : 2014.

Applicant's specified age group for testing : For age over 3 years.

Clause	Requirements	Results
4	General requirements	
4.1	Material cleanliness	Pass
4.8	Points and metallic wires	Pass
7	Warnings, markings and instructions for use	See remark

Note : The above clauses appropriate to this item. Those clauses not referred to were considered not applicable.

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

Remark :

Below are additional information according to the Toy Safety Directives 2009/48/EC requirement.
These information also appears as a note within the EN71 but are not standard requirements:

1. Marking

The manufacturer's and importer's name, registered trade name or registered trade mark, the address and type, batch, serial or model number or other element allowing their identification shall be indicated on the product itself. In addition, toys or packagings shall also bear the CE-marking.

After checking, it was found that:

- Manufacturer's name was on the packaging & toy.
- Manufacturer's address was on the packaging.
- Importer's name was missed on the packaging & toy.
- Importer's address was missed on the packaging & toy.
- Product identification code was on the packaging.
- CE-marking was on the packaging.
- CE-marking was in correct format.

Testing period : March 21, 2016 to March 25, 2016

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek

The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

2 Flammability Test

As per European Standard on Safety of Toys EN71-2 : 2011 + A1 : 2014.

<u>Clause</u>	<u>Testing items</u>	<u>Assessment</u>
4.1	General	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft filled toys	NA

Remark : P = Pass NA = Not applicable

Testing period : March 21, 2016 to March 25, 2016

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



Number: BKKH16004139

TEST REPORT

Test conducted:

3 19 Toxic elements migration test

(A) Test result

With reference to BS EN 71-3: 2013 +A1 : 2014. Determined by ICP-MS and GC-MS.

Category (III): Scraped-off toy material

<u>Element (Soluble)</u>	<u>Result (mg/kg)</u>					<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	(1)	(2)	(3)	(4)	(5)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminium (Al)	ND	126	193	<5	166	1	5	70000
Antimony (Sb)	ND	ND	ND	ND	ND	1	5	560
Arsenic (As)	ND	0.42	<0.1	ND	ND	0.02	0.1	47
Barium (Ba)	ND	11	<5	ND	<5	1	5	18750
Boron (B)	<5	<5	6	ND	64	1	5	15000
Cadmium (Cd)	ND	0.14	<0.1	<0.1	<0.1	0.02	0.1	17
Chromium (Cr) Δ	0.06	6.418	0.326	0.025	0.066	0.001	0.005	-
Chromium (III) (Cr III) ▲	NC	NC	NC	NC	NC	-	-	460
Chromium (VI) (Cr VI) ▲	NC	<0.2#	<0.2#	NC	NC	-	-	0.2
Cobalt (Co)	ND	ND	ND	ND	ND	0.2	1	130
Copper (Cu)	<5	6	<5	ND	ND	1	5	7700
Lead (Pb)	ND	2.6	<1	1	2	0.2	1	160
Manganese (Mn)	<5	23	<5	40	44	1	5	15000
Mercury (Hg)	ND	<1	ND	ND	ND	0.2	1	94
Nickel (Ni)	ND	ND	ND	ND	<5	1	5	930
Selenium (Se)	ND	ND	ND	ND	ND	1	5	460
Strontium (Sr)	ND	<5	ND	22	10	1	5	56000
Tin (Sn) ΔΔ	<1	1.71	ND	3	<1	0.2	1	180000
Organic tin	NC	NC	NC	NC	NC	1	3	12
Zinc (Zn)	14	25	87	8	17	1	5	46000

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

19 Toxic elements migration test

(A) Test result

With reference to BS EN 71-3: 2013 +A1 : 2014. Determined by ICP-MS and GC-MS.

Category (III): Scraped-off toy material

<u>Element (Soluble)</u>	<u>Result (mg/kg)</u>					<u>LOD</u>	<u>LOQ</u>	<u>Limit</u>
	(6)	(7)	(8)	(9)	(10)	(mg/kg)	(mg/kg)	(mg/kg)
Aluminium (Al)	222	146	2194	173	<5	1	5	70000
Antimony (Sb)	ND	ND	ND	ND	ND	1	5	560
Arsenic (As)	<0.1	<0.1	0.11	<0.1	<0.1	0.02	0.1	47
Barium (Ba)	7	9	5	9	9	1	5	18750
Boron (B)	35	36	23	24	33	1	5	15000
Cadmium (Cd)	0.25	0.29	<0.1	<0.1	<0.1	0.02	0.1	17
Chromium (Cr) Δ	0.329	0.193	0.242	0.196	0.308	0.001	0.005	-
Chromium (III) (Cr III) ▲	NC	NC	NC	NC	NC	-	-	460
Chromium (VI) (Cr VI) ▲	<0.2#	NC	<0.2#	NC	<0.2#	-	-	0.2
Cobalt (Co)	ND	ND	ND	ND	ND	0.2	1	130
Copper (Cu)	<5	<5	<5	25	<5	1	5	7700
Lead (Pb)	<1	<1	<1	<1	<1	0.2	1	160
Manganese (Mn)	14	19	12	11	15	1	5	15000
Mercury (Hg)	ND	ND	ND	ND	ND	0.2	1	94
Nickel (Ni)	<5	<5	ND	ND	ND	1	5	930
Selenium (Se)	ND	ND	ND	ND	ND	1	5	460
Strontium (Sr)	<5	<5	<5	<5	<5	1	5	56000
Tin (Sn) ΔΔ	ND	ND	ND	ND	ND	0.2	1	180000
Organic tin	NC	NC	NC	NC	NC	1	3	12
Zinc (Zn)	115	69	187	84	28	1	5	46000

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

19 Toxic elements migration test

(A) Test result

With reference to BS EN 71-3: 2013 +A1 : 2014. Determined by ICP-MS and GC-MS.

Category (III): Scraped-off toy material

<u>Element (Soluble)</u>	<u>Result (mg/kg)</u>	<u>LOD</u> <u>(mg/kg)</u>	<u>LOQ</u> <u>(mg/kg)</u>	<u>Limit</u> <u>(mg/kg)</u>
	(11)			
Aluminium (Al)	3449	1	5	70000
Antimony (Sb)	ND	1	5	560
Arsenic (As)	0.23	0.02	0.1	47
Barium (Ba)	10	1	5	18750
Boron (B)	29	1	5	15000
Cadmium (Cd)	<0.1	0.02	0.1	17
Chromium (Cr) Δ	0.923	0.001	0.005	-
Chromium (III) (Cr III) ▲	NC	-	-	460
Chromium (VI) (Cr VI) ▲	<0.2#	-	-	0.2
Cobalt (Co)	ND	0.2	1	130
Copper (Cu)	<5	1	5	7700
Lead (Pb)	1	0.2	1	160
Manganese (Mn)	18	1	5	15000
Mercury (Hg)	ND	0.2	1	94
Nickel (Ni)	<5	1	5	930
Selenium (Se)	ND	1	5	460
Strontium (Sr)	6	1	5	56000
Tin (Sn) ΔΔ	ND	0.2	1	180000
Organic tin	NC	1	3	12
Zinc (Zn)	94	1	5	46000

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

Remark: mg/kg = Milligram per kilogram = ppm
< = Less than
NC = Not conducted
ND = Not detected (Less than LOD)
LOD = Limit of Detection
LOQ = Limit of Quantitation
▲ = Tested items are not included in the TISI Accreditation

Δ= If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium (III) and Chromium (VI).

ΔΔ = If the migration of total Tin is below the maximum limit for Organic Tin, it can be inferred that the material complies with the requirements for Organic Tin.

- Organic tin test result was expressed as tributyl tin.

- As per EC decision 2013/492/EU of 7 October 2013 and in accordance with Court's Order of 15 May 2013 in case T-198/12R, the European Commission authorizes that the national provisions notified by the Federal Republic of Germany concerning limit values for Antimony(Sb)(60mg/kg), Arsenic (As)(25mg/kg), Mercury (Hg)(60mg/kg), Barium (Ba)(1000mg/kg) and Lead (Pb)(90mg/kg) in toys be maintained beyond 20 July 2013.

= Confirmation of Chromium (VI) test was performed on the tested component. And the reported value of migration of Chromium (III) = migration value of total Chromium – migration value of Chromium(VI).

* = Confirmation test was performed on the tested component. The reported value was the sum of the migration values of Methyl tin, Butyl tin, Dibutyl tin, Tributyl tin, Tetrabutyl tin, n-Octyl tin, Di-n-octyl tin, Di-n-propyl tin, Diphenyl tin and Triphenyl tin after converted to Tributyl tin by calculation.

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



TEST REPORT

Number: BKKH16004139

Test conducted:

Tested components:

	Report	Date
(1) 5020038 : Lacquer Water Base	REFER BKKH15000568	Jan 21, 2015
(2) 5029034 Green Coating On Wood	REFER BKKH15002674	Mar 09, 2015
(3) 5020031 Green coating on wood	REFER BKKH15010877	Aug 28, 2015
(4) Solid wood	REFER BKKH15014517	Nov 20, 2015
(5) Sawdust Wood	REFER BKKH15014517	Nov 20, 2015
(6) 5020035 Yellow Coating On Wood	REFER BKKH15014510	Nov 27, 2015
(7) 5020030 Yellow Coating On Wood	REFER BKKH15014509	Nov 27, 2015
(8) 5020032 Blue Coating On Wood	REFER BKKH15014509	Nov 27, 2015
(9) 5020033 Orange Coating On Wood	REFER BKKH15014509	Nov 27, 2015
(10) 5029040 Orange Coating On Wood	REFER BKKH15014513	Nov 30, 2015
(11) 5029074 Blue Coating On Wood	REFER BKKH15014513	Nov 30, 2015

Note:

1. The toxic elements of EN71-3(2013) was not conducted on the above components of samples. Applicant claimed the components were tested on our previous test report.
2. According to European standard on safety of toys EN71-3 (2013). As received, the test portion of the components are less than 10 mg, therefore such components were not tested for toxic.
3. As requested by the applicant, EN71-3 (2013) test was conducted only on components listed in this report. Other components were not tested.

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.



The report shall not be reproduced without written approval from Intertek
The results relate only to the item tested.



Number: BKKH16004139

TEST REPORT

Test conducted:

(B) Categories of various toy materials

Category I: dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. the material can be ingested. contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or Sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III: Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone, leather and other materials).

Comment:

When tested as specified, the results of the tested components MET the 19 toxic elements limits of the European Council Directive 2009/48/EC and amendment 2012/7/EU on the Safety of Toys.

Note: LOD and LOQ value in this test report were effective since October, 2014

*****END*****/KS/ST
Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: <http://www.intertek.com/terms/>. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk. This report shall not be reproduced, except in full.

Intertek Testing Services (Thailand) Ltd.

1285/5 Prachachuen Road, Wong-Sawang, Bangsue, Bangkok 10800 Thailand

Tel.: (662) 837-2999 Fax: (662) 837-2936

E-mail Address: tfh.thailand@intertek.com

Attention is drawn to the Terms and Conditions printed overleaf.